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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/649,896	08/28/2003	Byeong-Hoon Lee	P24069	5627
7055	7590	09/15/2005	EXAMINER	
GREENBLUM & BERNSTEIN, P.L.C.			SPISICH, GEORGE D	
1950 ROLAND CLARKE PLACE			ART UNIT	
RESTON, VA 20191			PAPER NUMBER	

3616

DATE MAILED: 09/15/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/649,896

Applicant(s)

LEE, BYEONG-HOON

Examiner

George D. Spisich

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 28 August 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 12/4/03.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_.

## **DETAILED ACTION**

### ***Information Disclosure Statement***

The information disclosure statement filed December 4, 2003 fails to comply with 37 CFR 1.98(a)(2), which requires a legible copy of each cited foreign patent document; each non-patent literature publication or that portion which caused it to be listed; and all other information or that portion which caused it to be listed. It has been placed in the application file, but the information referred to therein has not been considered.

Reference JP2000-272524 has not been provided. Furthermore, reference JP57-142677 appears to be an incomplete copy of the document.

The information disclosure statement filed December 4, 2003 fails to comply with 37 CFR 1.98(a)(3) because it does not include a concise explanation of the relevance, as it is presently understood by the individual designated in 37 CFR 1.56(c) most knowledgeable about the content of the information, of each patent listed that is not in the English language. It has been placed in the application file, but the information referred to therein has not been considered.

The following references do not include a concise statement of relevance (such as an Abstract) in English: JP6-1110, JP3-112468, JP64-51567, JP63-52666, JP63-12470, JP60-144569 and JP57-142677.

Furthermore, the listed "English Language Abstracts" in the "Other Documents" portion of the PTO-1449 are of particular Japanese documents listed, are not

considered "Other Documents" but are what is required to be filed with a particular Japanese document to be considered.

### ***Drawings***

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the movable gear attached to the lower column member as claimed in claim 5, (which is not shown in the Figures) must be shown or the feature(s) canceled from the claim(s). No new matter should be entered. Examiner believes this should be shown in Figure 9, however, Figure 9 does not show the movable gear (320) or what is labeled 15 as attached to the lower column member. It is unclear how element labeled "15" is attached to the lower column member. Examiner believes the lower column member which is currently unnumbered should be labeled as "15" and the tilt/lock "housing" should be shown as supported by the lower column member similar but in reverse as what is shown in Figure 8.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet,

and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference character "15" has been used to designate both the lower column member in Figure 8 and the tilt locking mechanism housing in Figure 9. Examiner believes that since the "housing" 15 in Figure 9 is intended to be connected to the lower column member, that this would be sufficient, however, since the "housing" is not shown as connected to the lower column member (unnumbered), it is improper. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective

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action in the next Office action. The objection to the drawings will not be held in abeyance.

Examiner further objects to Figure 9 as not being properly able to function. The upper column member (140) is shown in Figure 9 to encircle the lower column member (unnumbered) with the pivot pin there between. It is unclear to the Examiner how the upper column member would be able to be pivoted/tilted since it encircles the lower column member.

### ***Specification***

The abstract of the disclosure is objected to because in lines 1 and 2, the phrase "of which low end.....of which top end" is not proper grammar. Examiner suggests "of which the lower end.....or which the upper end". Correction is required. See MPEP § 608.01(b).

Applicant is reminded of the proper content of an abstract of the disclosure.

A patent abstract is a concise statement of the technical disclosure of the patent and should include that which is new in the art to which the invention pertains. If the patent is of a basic nature, the entire technical disclosure may be new in the art, and the abstract should be directed to the entire disclosure. If the patent is in the nature of an improvement in an old apparatus, process, product, or composition, the abstract should include the technical disclosure of the improvement. In certain patents, particularly those for compounds and compositions, wherein the process for making and/or the use thereof are not obvious, the abstract should set forth a process for making and/or use thereof. If the new technical disclosure involves modifications or alternatives, the abstract should mention by way of example the preferred modification or alternative.

The abstract should not refer to purported merits or speculative applications of the invention and should not compare the invention with the prior art.

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Where applicable, the abstract should include the following:

- (1) if a machine or apparatus, its organization and operation;
- (2) if an article, its method of making;
- (3) if a chemical compound, its identity and use;
- (4) if a mixture, its ingredients;
- (5) if a process, the steps.

Extensive mechanical and design details of apparatus should not be given.

The Abstract provided does not appear to describe the invention in sufficient detail. Examiner believes the mounting of the fixed and moveable gears to either the lower or upper column members and interaction of the locking mechanism as essential detail to be provided in the Abstract.

The disclosure is objected to because of the following informalities:

On page 9, line 4, "part f" should be - - part of - -.

On at least pages 8-10 and 12-13, description of the "female screw" being "attached" to the upper or lower column member and "locked" with the feed screw bar is not proper. The "female screw" is not a separate element that can be disclosed as being "attached" to the upper or lower column member or "locked" to the feed screw bar.

Appropriate correction is required.

***Claim Rejections - 35 USC § 112***

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 5 and 6 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. Claims 5 and 6 as is shown in Figure 9 do not appear to claim a tilt steering column that can properly operate. Figure 9 shows the upper column member 140 encircling the lower column member such that it would not allow for the claimed tilting of the steering column.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-8 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 1, lines 15-16 and claim 5, lines 15-16, there is claimed a "female screw attached" to the upper or lower column member, or that this female screw is "locked" to a feed screw bar. This is unclear. There is no element such as a female screw, and no



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element is separate such that it is "attached" to either the upper or lower column member and the term "locked" is not proper or accurate to claim the engagement between the "female screw" and the feed screw bar. Examiner understands Applicant intent to claim mating screw threads, but cannot claim this detail as a screw or that it is attached to the member when it is not a separate element and it is simply a detail of the upper or lower member or locked with another threaded element.

In claims 1 and 5, lines 16-17, it is unclear to claim "to tooth-lock". This phrase is not proper and furthermore, there have not been "teeth" claimed on the gears that engage to "lock" the fixed gear and the movable gear.

In claim 7, line 4, "toothed to the driving gear" is not clear. The term "toothed" is not proper.

### ***Allowable Subject Matter***

Claims 1-4,7 and 8 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action.

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Jolley (USPN 6,272,945), Satoh et al. (USPN 6,282,977), Yamamoto (USPN 4,752,085), Arvidsson (USPN 5,035,446), Herron et al. (USPN

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5,163,337), Kinoshita (USPN 4,593,577), Beauch (USPN 4,892,330), Herron et al. (USPN 5,419,215), Spencer et al. (USPN 5,899,497), Hibino et al. (USPN 5,915,726), Yamaguchi et al. (USPN 5,144,855), Snell et al. (USPN 5,823,062).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to George D. Spisich whose telephone number is (571) 272-6676. The examiner can normally be reached on Monday-Friday 9:00 to 6:30 except alt. Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul Dickson can be reached on (571) 272-6669. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

George D. Spisich  
September 12, 2003

 9/13/05

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